

**Viewpoint 16W.** Looking west toward the intersection with Coon Street and Brockway Vista Avenue.



**Viewpoint 16E.** Looking east east toward the intersection with Fox Street.



**Viewpoint 17W.** Looking west toward the intersection with Fox Street.



**Viewpoint 17E.** Looking east toward the intersection with Chipmunk Street.

smaller ornamental trees and herbaceous vegetation. Lining the highway are primarily tourist-based commercial businesses such as motels and lodges, restaurants, gift shops, gas stations, and recreation craft rentals with a few condominiums and private single-family residences also facing the highway.

Power lines are not visible throughout this roadway unit. Fencing along the roadway includes split wood, chain link, and some wood board, and also includes a few stone, concrete, and brick elements. Business signs are of various types including wooden, neon, and light-behind plastic. Various building materials in use include wood panel and wood siding of various types and colors, concrete block, painted brick, stone façade, glass and steel, and stucco. At least one prominent building north of the highway, on the east end of the roadway unit appears to be under construction or renovation.

Curbs, gutters, sidewalks, landscaping, and directed lighting are largely absent with the exception of the right of way of the Safeway grocery store northwest of the intersection of Highways 28 and 267 and that of the Kings Beach State Recreation Area south of SR 28 roughly in the middle of Unit 20B. The existing roadway shoulder treatment is inconsistent, which creates uncertainty and distractions for motorists. Some light fixtures in these two areas are of matching design and integrate well with the existing architectural site features (see Figure 6, Viewpoint 6 and Figure 13, Viewpoint 15W). Standard tall galvanized steel streetlights currently light the highway and intersections (see Figure 12, Viewpoint 14E or 15E).

Views of Lake Tahoe are especially apparent, though somewhat blocked by street parking, across Kings Beach State Recreation Area near the middle of Unit 20B. Middleground and background views of the distant ridgelines are apparent at the east and west ends of the highway viewshed. With the exception of these middleground and background views, viewing distance is limited to the foreground by vegetation and the winding nature of the roadway.

The existing travel route rating and scenic quality rating of this unit is summarized in Tables 1 and 2, respectively.

## Roadway Unit 40—Brockway Cutoff

Roadway Unit 40 extends along SR 267 from the intersection with SR 28 at the south end to the intersection with Cambridge Drive to the north. Viewers in this unit include residents, travelers on SR 267, and recreationists.

Dense, mature coniferous trees are especially prominent in this unit surrounding residences on either side of the roadway. Power lines are prominent at the north end of this unit (see Figure 7, Viewpoint 7) but are no longer visible at the point where the highway meets the Old Brockway Golf Course (see Figure 7, Viewpoint 8). The Old Brockway Golf Course borders the west side of the southern two-thirds of this roadway unit (see Figure 8, Viewpoint 9). Shorter mature deciduous trees primarily line this area along a split wood fence. On a

clear day, Mount Tallac can be seen briefly in the background between these trees (see Figure 8, Viewpoint 10 and Figure 9, Viewpoint 11).

The two-lane highway has a shoulder that is a few feet wide but has no curbs, gutters, or sidewalks. The residences along the highway were built using wood and concrete with wood, metal, and asphalt shingle roofing. Lake Tahoe can be seen between the condominiums and the trees from SR 267 at the intersection with SR 28 however, middleground and background views are limited by vegetation and the winding nature of the roadway (see Figure 8, Viewpoint 10).

The existing travel route rating and scenic quality rating of this unit is summarized in Tables 1 and 2, respectively.

### Shoreline Unit 21—Agate Bay

Shoreline Unit 21 extends from the western end of Tahoe Vista approximately to Coon Street in Kings Beach. Viewers in this unit are residents, businesses, and recreationists.

This sandy shoreline includes several single-family residences and condominiums, several piers, a small marina, and public beach access. Views from the lake are of shoreline buildings with various materials and colors, mixed with mature coniferous vegetation leading to mountain peaks in the background. Recreationists can be common on the shore or in boats. Nighttime views of the shore from the lake are primarily spotted with low-intensity residence lighting.

The existing travel route rating and scenic quality rating of this unit is summarized in Tables 1 and 2, respectively.

## **Shoreline Unit 22—Brockway**

Shoreline Unit 22 extends from Coon Street through Brockway on the east side of the Nevada-California state line. Viewers in this unit are residents, businesses, and recreationists.

This shoreline unit is primarily characterized by residences with private beach access and several piers. The shoreline wraps around Lake Tahoe's northernmost peninsula. Views from the lake include mature coniferous vegetation with the peninsula's ridgeline in the middleground and the often snow-capped mountain peaks in the background. Especially toward the tip of the peninsula to the east end of Unit 22, the shore is generally more steep and rocky than some of the more gradual sandy beaches west of this unit. Nighttime views of the shore from the lake are primarily spotted with low-intensity residence lighting.

The existing travel route rating and scenic quality rating of this unit is summarized in Tables 1 and 2, respectively.

### **Recreation Unit 9—Kings Beach**

Recreation Unit 9 represents the Kings Beach State Recreation Area, which includes 1,400 linear feet of beach with a pier, picnic area, boat launch, restrooms, parking facilities, and the North Tahoe Conference Center. Viewers in this unit are primarily recreationists (see Figure 13, Viewpoint 15W).

Recreationists in the water can see Mount Baldy and other surrounding ridgelines in the background. With recreationists on the beach, they can also see through the mature coniferous and deciduous vegetation interspersed throughout the area to the businesses on the north side of SR 28. The parking area between the beach and SR 28 has well-defined brick paver walkways, split wood fencing, low stone walls, large landscape rocks, telephone pole-sized wood landscape barriers, and low herbaceous landscape vegetation. The restroom design blends well with the regional character.

The tall parking lot lighting is directed downward while the walkways are lit with shorter light fixtures that integrate well with the existing architectural site features.

The existing travel route rating and scenic quality rating of this unit is summarized in Tables 1 and 2, respectively.

Table 1. 2001 Travel Route Ratings and Comments

	2001 Travel Route Rating	2001 Rating Comments
Roadway Units		
20B—Kings Beach	12.5	This unit extends approximately 1.2 miles from Beach St. to lakeside part of Chipmunk Dr. Improvements noted since 1996 include remodel of Safeway and landscaping and structure upgrade at the golf course, and the California Tahoe Conservancy removal of fence and spa building at North Tahoe Beach Center site. Some sign and facade improvements have also occurred in Kings Beach. The new fish mural is an improvement to a large blank wall without creating distraction from natural setting. This unit is not in threshold attainment.
40— Brockway Cutoff	15	The focused lake view down the golf course has been degraded through addition and maturation of landscaping in the fairway and placement of new cafe/pro shop structure. This is true even though the terminus of the view at the lake has improved with removal of structure and fence at Tahoe Beach Center site. The golf course cafe/pro shop displays improved architectural features compared to the previous structure, yet is more visible from this unit. Required landscaping mitigation will likely, over time, allow an improvement in the man-made features score. This unit is not in threshold attainment.
Shoreline Units		
21—Agate Bay	8	The low man-made features rating reflects, in part, the number of boats and beach equipment clutter found along the beach throughout this unit. Several residential rebuilds include poor setback and screening characteristics. Two tourist accommodation upgrade projects fail to make scenic improvements. This unit remains at risk.
22— Brockway	9	New medium large houses with inadequate screening and large window area reduce the manmade features score. The reduction in variety reflects an amendment in previous scores and the loss of some native shoreline vegetation. This unit is not in threshold attainment and is at risk.
Recreation Area	ı	
9—Kings Beach	n/a	
Source: TRPA	2002	

Table 2. 2001 Scenic Quality Ratings and Comments

	2001 Scenic Quality Rating	2001 Rating Comments
Roadway Units		
20B—Kings Beach	9	A short lake view at the base of SR 267 has opened through CTC removal of a structure and view-blocking fence. A framed view of Mt. Tallac is offered, blocked in some areas with residual nonnative vegetation.
40— Brockway Cutoff	8	The addition of landscaping along the fairway blocks this targeted view. In addition, construction of the relocated café/pro shop at the golf course narrows the frame of the view and changes its character.
Shoreline Units		
21—Agate Bay	8	n/a
22— Brockway	9	n/a
Recreation Area	ı	
9—Kings Beach	12	The distractions of poorly maintained commercial buildings to the north have been removed by the CTC park project. Commercial development across the highway and the roadway itself has become visible in this area, however, precluding an increase in the Intactness score. As vegetation matures, Intactness will probably improve.

#### **Viewer Groups and Viewer Responses**

Viewer groups in the vicinity of the action area and their sensitivity to visual changes in the area are characterized below.

#### Residents

Approximately four single-family residences (see Figure 14, Viewpoint 16W for an example), two residence/businesses, two multi-family residences, and one area with several condominiums and timeshares (see Figure 8, Viewpoint 10 for an example) border directly onto SR 28 in the project area. These residences have direct views of the project site either across open driveways or through existing vegetation, and will likely be most affected by the proposed project.

Residents are likely to have moderately high sensitivity to visual changes due to close proximity to the project site and a high sense of ownership over views from their residences.

#### **Recreational Users**

Recreational users who would view the proposed project are more likely to seek the project area for its unique visual qualities and regard the natural and built surroundings as a holistic visual experience. Recreational users include visitors of miniature golf, the Kings Beach State Recreation Area, boaters at the adjoining boat launch, and watercraft renters as well as tourist patrons of various Kings Beach gift shops, restaurants, and motels, lodges, and cottages.

Recreational users seeking more active activities such as miniature golf or water sports are likely to be more transitory, distant from the project site, and focused on the particular activity while tourist patrons are likely to walk, eat, and shop along the project site and will be more affected by the proposed project. Therefore, recreational users are likely to have moderate to moderately high sensitivity to visual changes at the project site.

#### **Businesses**

The project site is primarily lined by businesses directly facing SR 28. These businesses depend largely upon tourism, and tourists visit the area largely because of its scenic beauty. Therefore, the proposed project's cumulative effect upon the area's scenic beauty is likely to directly affect businesses.

Due to their direct relationship to the project site's scenic beauty, businesses within view of the project site are likely to have moderately high sensitivity to visual changes.

#### **Roadway Travelers**

Travelers use roadways at varying speeds; normal highway and roadway speeds differ based on the traveler's familiarity with the route and roadway conditions (i.e., presence or absence of rain or snow); however, the posted speed limit within the project site is 30 mph. Views on the western half of the project site are shorter in duration and distance due to the slightly higher amount of activity and the gradual curve in the roadway while views in the eastern half are slightly more expansive on the straighter stretch of highway.

Motorists traveling along SR 28 include area residents, commuters, tourists, and park users from the region and beyond. Viewers such as residents and commuters who frequently travel these routes generally possess moderate visual sensitivity to their surroundings. The passing landscape becomes familiar to these viewers, and their attention typically is not focused on the passing views but on the roadway, roadway signs, surrounding traffic, and pedestrian activity. Viewers who travel local routes for their scenic quality generally possess a higher visual sensitivity to their surroundings because they are likely to respond to the natural environment with a high regard and as a holistic visual experience.

Viewer sensitivity is moderate among most roadway travelers anticipated to view the action area. The passing landscape becomes familiar to frequent viewers while tourists are likely to be more sensitive at standard roadway speeds. Further, at these speeds, expansive views are of somewhat limited duration and roadway users are fleetingly aware of surrounding traffic, road signs, their immediate surroundings within the automobile, and other visual features.

## **Environmental Consequences**

## Standards for Determining Significance under NEPA

National Environmental Policy Act (NEPA) criteria for determining significance are listed in Title 40, Code of Federal Regulations (CFR), Section 1508.27, but are considered broader and less stringent than California Environmental Quality Act (CEQA) criteria, set forth below. Also, the CEQA criteria below incorporate NEPA standards. For these reasons, identification of impacts as significant under CEQA is treated herein as sufficient for identifying impacts considered significant under NEPA. Mitigation measures set forth to minimize CEQA significant impacts are presumed to also mitigate NEPA significant impacts. These assumptions are made only for the purpose of identifying the magnitude of particular impacts; this document complies with NEPA requirements and uses the CEQA analysis only as a source of supporting information.

## Standards for Determining Significance under CEQA

Under State CEQA Guidelines a proposed action would have a significant environmental effect on visual resources if it would:

- have a substantial adverse effect on a scenic vista;
- substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- substantially degrade the existing visual character or quality of the site and its surroundings; or
- create a new source of substantial light or glare that would adversely affect day or nighttime public views.

These four guidelines were used as a framework for analysis; however, the TRPA criteria for evaluating impacts are used as the threshold for determining significance.

## Criteria for Determining Significance under the TRPA

The TRPA Scenic Quality Improvement Program (SQIP) guidelines were used to determine whether the proposed action would have a significant environmental effect. The proposed project action may have a significant effect on visual resources and potentially can be denied if the ratings for scenic resources indicators are lowered by the proposed project. Especially in units that are in non-attainment or at risk, it is also expected that each project must seek to improve pre-project conditions, therefore, improving existing threshold ratings. These thresholds are described under "Regulatory Setting."

### Tahoe Regional Planning Agency 2001 Threshold Evaluation Draft Standards

#### Context-Based Standards

According to the TRPA, numerical standards are drawn from the context of other numerical ratings.

Although a numerical standard to assess threshold attainment for community design does not exist, it is possible to draw conclusions from other numerical ratings (TRPA 2002).

#### Types of Improvements Affecting Scores

The most dramatic improvements in 2001 were seen in the South Lake Tahoe Redevelopment Area.

Removal of degraded structures, improvement in architectural quality of new and remodeled structures, increased landscaping and landscaped open space, decreases in highway curb cuts, and improved signage have all contributed to a remarkable transformation.

Improvements similar to the proposed project were seen east of Unit 20B.

The North Stateline Beautification project in Washoe County has resulted in improved scenic quality in the built environment with the construction of a sidewalk and landscaping project (TRPA 2002).

The single most dramatic numerical improvement was four points.

Overall, roadway travel route scores improved in 16 units with a total improvement of 22.5 points. Of these, 5.5 points result, in whole or in part, from reassessment of previous scores. The most dramatic improvement, four points, was realized in Unit 33-The Strip (TRPA 2002).

#### **Expected Threshold Attainment for Unit 20B**

Unit 20B was expected to produce scores closer to attainment near 2007.

Considering existing trends and planning efforts, and the scope of needed improvements to reach attainment, the following roadway units are positioned to reach attainment in the fairly short-term: Unit 18, Carnelian Bay, and Unit 25, Crystal Bay. In addition, continued improvements in Unit 20B, Kings Beach and Unit 33, The Strip are underway and may produce scores much closer to attainment within the next five years (TRPA 2002).

## Methods and Assumptions for the Effect Analysis

The analysis of potential effects on visual resources and aesthetics is based on field observations of the project action area and surroundings and review of the following:

engineering data and drawings for the proposed action and for the Project,

- aerial and ground-level photographs of the action area,
- conceptual computer-generated visual simulations from representative viewpoints, and
- relevant planning documents.

The simulations depict the visual effects of Alternatives 2, 3, 4, and 5 (see Appendix B). The simulations include landscaping, which is not presently part of the project description; however, the simulations help to give a general idea of how the lane widening under each alternative—particularly the appearance of the lane and sidewalk widths.

For purposes of this analysis, the TRPA thresholds of significance apply.

## **Impact Discussion**

## **CEQA Checklist Impacts**

## Impact VIS-1: Temporary Visual Impacts Caused by Construction Activities (Less Than Significant)

#### Alternatives 2, 3, 4, and 5

Construction activities in the project area would create temporary changes in views of and from the action area. While construction activities would take place over an eight to ten-month period of time split over two years, construction of project elements would be intermittent and temporary. Construction activities associated with the proposed project would introduce considerable heavy equipment and associated vehicles, including dozers, graders, and trucks into the viewshed of all viewer groups. The proposed action would result in short-term visual effects.

All viewer groups would be affected by this change in visual quality, although the effect would vary in degree depending on the viewer location and sensitivity. The most affected viewers would be residents and businesses adjacent to the roadway. Impacts on these residences and businesses are considered adverse because they would experience a short-term change in the visual character of their views. However, construction activities are temporary, and all viewer groups in the action area and vicinity are accustomed to seeing construction activities and equipment from other local construction activities.

This effect is considered less than significant because construction activities are intermittent and temporary and all viewer groups in the action area and vicinity are accustomed to seeing construction activities and equipment. Additionally, construction activities would be limited to the hours of 8:00 a.m. to 5:00 p.m.

#### No Action

Under these scenarios, no construction-related visual effects would occur. No mitigation is required.

## Impact VIS-2: Adversely Affect a Scenic Vista (Less Than Significant)

#### Alternatives 2, 3, 4, and 5

Each proposed alternative includes 5-foot bicycle lanes and improved sidewalks extending the length of the project area from east to west. Each alternative also includes improved bicycle and pedestrian crosswalks across SR 28 as well as aesthetic improvements such as new streetlights, benches, transit facilities, planters, bicycle racks, trash receptacles, and additional landscaping.

These common proposed project actions would have a variable effect based on viewer group and location within the landscape. Residents (private views) and businesses would experience the greatest effect, whereas recreationists and roadway travelers (public views) would experience less change in viewshed.

The project site is located within Unit 20B, which has a travel route rating that is below the established threshold attainment rating.

Consistent sidewalks, curbs, and roadway markings would lessen overall distractions for motorists. These impacts would have minimal impacts to views of Lake Tahoe and ridgelines within the roadway viewshed to the east or west. Therefore, these impacts common to all alternatives are considered less than significant.

#### Alternative 1, No Action

Under this scenario, no visual effects would occur. No mitigation is required.

#### Alternative 2

Alternative 2 consists of a three-lane cross-section and no on-street parking during the summer on either side of SR 28, with roundabouts at Bear Street and Coon Street. A sub-alternative also involves adding a traffic circle at the intersection with SR 267. An 18-foot sidewalk/planting area would be provided in both directions.

The proposed traffic circles would remove obstructing traffic signals from the roadway viewshed to the east and west while they would also cause motorists to be slightly more spatially aware of traffic at intersections. Limiting on-street parking during the summer would also remove the obstruction to views of Lake Tahoe for businesses, recreationists, and motorists and remove a distraction to

motorists. Therefore, the proposed changes in Alternative 2 would not adversely affect scenic vistas and are considered less than significant.

#### Alternative 3

Alternative 3 consists of four-lane cross-section and on-street parking along both sides of SR 28, with traffic signals at SR 267, Bear Street, and Coon Street. Left turn lanes would be provided on SR 28 at Fox Street. A minimum 5.4-foot wide sidewalk would be provided in both directions.

The proposed minimal changes in Alternative 3 would not adversely affect scenic vistas and are considered less than significant.

#### Alternative 4

Alternative 4 is identical to Alternative 2, except that on-street parking would be prohibited over the entire year (including winter).

The proposed traffic circles would remove obstructing traffic signals from the roadway viewshed to the east and west. Limiting on-street parking over the entire year would further remove the obstruction to views of Lake Tahoe for businesses, recreationists, and motorists. Therefore, the proposed changes in Alternative 4 would not adversely affect scenic vistas and are considered less than significant.

#### Alternative 5

Alternative 5 consists of two travel lanes westbound on SR 28 with adjacent onstreet parking, a center turn lane, a single eastbound through lane without adjacent on-street parking (year-round), and roundabouts at Bear Street, and Coon Street. A sub-alternative also involves adding a traffic circle at the intersection with SR 267. A 10-foot sidewalk/planting area would be provided in both directions.

Limiting on-street parking to only the north side of the highway would somewhat remove the obstruction to views of Lake Tahoe for businesses, recreationists, and motorists. Therefore, the proposed changes in Alternative 5 would not adversely affect scenic vistas and are considered less than significant.

## Impact VIS-3: Damage Scenic Resources Along a Scenic Highway (No Impact)

While SR 28 is an eligible state scenic highway, California currently does not officially designate it a state scenic highway. The state of Nevada does list SR 28 as a Nevada State Scenic Byway but the east end of the proposed project is more than 0.75 mile from the Nevada border. Therefore, the proposed project would not damage scenic resources along a scenic highway and there would be no impacts.

# Impact VIS-4: Degrade the Existing Visual Character or Quality of the Site and Its Surroundings (Less Than Significant)

Each proposed alternative includes 5-foot bicycle lanes and improved sidewalks extending the length of the project area from east to west. Each alternative also includes improved bicycle and pedestrian crosswalks across SR 28 as well as aesthetic improvements such as new streetlights, benches, transit facilities, planters, bicycle racks, trash receptacles, and additional landscaping.

These common proposed project actions would have a variable effect based on viewer group and location within the landscape. Residents (private views) and businesses would experience the greatest effect, whereas recreationists and roadway travelers (public views) would experience less change in viewshed.

#### Alternative 2

Alternative 2 consists of a three-lane cross-section and no on-street parking during the summer on either side of SR 28, with roundabouts at Bear Street and Coon Street. A sub-alternative also involves adding a traffic circle at the intersection with SR 267. An 18-foot sidewalk/planting area would be provided in both directions.

Reducing the number of lanes, removing on-street parking in the summer, and adding an expansive sidewalk would improve the overall visual quality on SR 28. However, reducing the number of lanes would potentially increase the number of vehicles in each lane at any one time, creating a slightly higher distraction for motorists. Overall, the proposed changes in Alternative 2 are considered less than significant.

#### Alternative 3

Alternative 3 consists of a four-lane cross-section and on-street parking along both sides of SR 28, with traffic signals at SR 267, Bear Street, and Coon Street. Left turn lanes would be provided on SR 28 at Fox Street. A minimum 5.4-foot wide sidewalk would be provided in both directions.

Adding sidewalks and left turn lanes at Fox Street would reduce motorist distractions somewhat. The proposed changes in Alternative 3 are considered less than significant.

#### Alternative 4

Alternative 4 is identical to Alternative 2, except that on-street parking would be prohibited over the entire year (including winter).

Reducing the number of lanes, removing on-street parking over the entire year, and adding an expansive sidewalk would improve the overall visual quality on SR 28. However, reducing the number of lanes would potentially increase the number of vehicles in each lane at any one time, creating a slightly higher distraction for motorists. Overall though, the proposed changes in Alternative 4 are considered less than significant.

#### Alternative 5

Alternative 5 consists of two travel lanes westbound on SR 28 with adjacent onstreet parking, a center turn lane, a single eastbound through lane without adjacent on-street parking (year-round), and roundabouts at Bear Street, and Coon Street. A sub-alternative also involves adding a traffic circle at the intersection with SR 267. A 10-foot sidewalk/planting area would be provided in both directions.

Reducing the number of lanes, reducing on-street parking, and adding a wide sidewalk would improve the overall visual quality on SR 28. However, reducing the number of lanes would potentially increase the number of vehicles in each lane at any one time, creating a slightly higher distraction for motorists. Overall, the proposed changes in Alternative 5 are considered less than significant.

## Impact VIS-5: Create a New Source of Light and Glare that Affects Views in the Area (Less Than Significant)

#### Alternatives 2, 3, 4, and 5

Alternatives 2, 3, 4, and 5 each propose replacing existing standard tall galvanized steel streetlights, presumably with a larger number of shorter lights, each with a more narrow spread of light.

#### **Nighttime Light**

This lighting plan is expected to be slightly less obtrusive and overall more pleasing for nighttime views of the area. Further, Alternative 5 would reduce the existing number of primary traffic lanes by one and Alternatives 2 and 4 would reduce the number of primary traffic lanes by two, which would reduce the impacts of vehicle headlights at any one time on SR 28. Thus, all action alternatives are considered less than significant. While the impact is considered less than significant, implementing Mitigation Measures VIS-1 and VIS-2 would improve the aesthetics of the proposed project area.

#### **Daytime and Nighttime Glare**

The proposed project would presumably replace chrome-colored streetlights with shorter earth-toned materials that would provide less daytime and nighttime glare. Therefore, all action alternatives are considered less than significant. While the impact is considered less than significant, implementing Mitigation Measure VIS-3 would improve the aesthetics of the proposed project area.

#### No Action

Under this scenario, no light or glare effects would occur. No mitigation is required.

## Impact VIS-6: Conflict with Policies or Goals Related to Visual Resources (No Impact)

#### Alternatives 2, 3, 4, and 5

Under these scenarios, no conflict with policies or goals would occur. No mitigation is required.

#### No Action

Under this scenario, no conflict with policies or goals would occur. No mitigation is required.

## **Specific Unit Impacts**

The potential changes resulting from the proposed project to existing travel route ratings and scenic quality ratings of each of the following units are summarized in Tables 3 and 4 (below), respectively.

## Impact VIS-7: Permanent Changes to Views in Roadway Unit 20B—Kings Beach (No Impact)

#### Alternatives 2, 4, and 5

Alternatives 2, 4, and 5 would reduce the number of primary traffic lanes, reduce or eliminate on-street parking, and add traffic circles that would improve the visual quality of SR 28 with landscaping in the center of motorists' views. Thus, Alternatives 2, 4, and 5 would increase the 2001 Travel Route Rating "Road Structure" score from 1 to 3 and would increase the "Roadway Distractions" score from 2 to 2.5 with all other scores remaining the same. This would result in an increase of 2.5 points for a total Travel Route Rating of 15.

The proposed project would increase the 2001 Scenic Quality Rating "Intactness" score from 2 to 3 with all other scores remaining the same. This would result in an increase of 1 point for a total Scenic Quality Rating of 10.

#### Alternative 3

Alternative 3 would improve the existing highway shoulder treatment with 5.4-foot wide sidewalks and improved highway fixtures. However, the number of primary traffic lanes and on-street parking would not be reduced and traffic circles would not be added for improved visual quality. Therefore, Alternative 3 would increase the 2001 Travel Route Rating "Road Structure" score from 1 to 2.5 and would increase the "Roadway Distractions" score from 2 to 2.5 with all other scores remaining the same. This would result in an increase of 2 points for a total Travel Route Rating of 14.5.

Alternative 3 would increase the 2001 Scenic Quality Rating "Intactness" score from 2 to 3 with all other scores remaining the same. This would result in an increase of 1 point for a total Scenic Quality Rating of 10.

### Impact VIS-7: Permanent Changes to Views in Roadway **Unit 40—Brockway Cutoff (No Impact)**

The proposed project would result in no changes in Travel Route Rating or Scenic Quality Rating scores.

## Impact VIS-8: Permanent Changes to Views in Shoreline **Unit 21—Agate Bay (No Impact)**

The proposed project would result in no changes in Travel Route Rating or Scenic Quality Rating scores.

## Impact VIS-9: Permanent Changes to Views in Shoreline **Unit 22—Brockway (No Impact)**

The proposed project would result in no changes in Travel Route Rating or Scenic Quality Rating scores.

### Impact VIS-10: Permanent Changes to Views in Recreation Unit 9—Kings Beach (No Impact)

The proposed project would result in no changes in Travel Route Rating or Scenic Quality Rating scores.

 Table 3.
 2001 Travel Route Rating Changes Resulting from the Proposed Project

	2001 Travel Route Rating (TRPA 2002)	Rating Change from the Proposed Project			
Roadway Units					
20B—Kings Beach	12.5	15*			
40—Brockway Cutoff	15	n/a			
Shoreline Units					
21—Agate Bay	8	n/a			
22—Brockway	9	n/a			
Recreation Area					
9—Kings Beach	n/a	n/a			
*Alternative 3 would change the Unit 20B score to 14.5.					

Alternative 5 would change the Unit 20B score to 14.5.

**Table 4.** 2001 Scenic Quality Rating Changes Resulting from the Proposed Project

	2001 Scenic Quality Rating	Rating Change from the Proposed Project
Roadway Units		
20B—Kings Beach	9	10
40—Brockway Cutoff	8	n/a
Shoreline Units		
21—Agate Bay	8	n/a
22—Brockway	9	n/a
Recreation Area		
9—Kings Beach	12	n/a

## **Mitigation Measures**

The proposed action incorporates the following mitigation measures to minimize visual resources impacts. Mitigation Measure VIS-1 and VIS-3 are from the TRPA Design Review Guidelines 1989.

### Mitigation Measure VIS-1: Lighting Levels

Avoid consistent overall lighting and overly bright lighting. The location of lighting should respond to the anticipated use and should not exceed the amount of light actually required by users. Lighting for pedestrian movement should illuminate entrances, changes in grade, path intersections, and other areas along paths which, if left unlit, would cause the user to feel insecure. As a general rule of thumb, one foot candle per square foot over the entire project area is adequate. Lighting suppliers and manufacturers have lighting design handbooks which can be consulted to determine fixture types, illumination needs and light standard heights.

## Mitigation Measure VIS-2: Directed Lighting

Lights will be screened and directed away from residences to the highest degree possible and the amount of nighttime lights used will be minimized to the highest degree possible. In particular, lighting shall employ shielding to minimize off-site light spill and glare. In addition:

- Luminaire spacing should be the maximum allowable for traffic safety.
- Luminaires should be cutoff-type fixtures that cast low-angle illumination to minimize incidental spillover of light onto adjacent private properties and

undeveloped open space. Fixtures that project upward or horizontally should not be used.

- Luminaires should be directed toward the roadway and away from adjacent residences and open space areas.
- Luminaire lamps should provide good color rendering and natural light qualities. Low-pressure and high-pressure sodium fixtures that are not colorcorrected should not be used.
- Luminaire intensity should be the minimum allowable for traffic safety.
- Luminaire mountings should be downcast and the height of the poles minimized to reduce potential for backscatter into the nighttime sky and incidental spillover of light into adjacent private properties and open space.
- Luminaire mountings should have nonglare finishes.

### Mitigation Measure VIS-3: Highway Fixtures with Low-Sheen and Non-Reflective Surface Materials

Guardrails and other highway fixtures, including but not limited to, retaining walls, safety barriers, traffic signals and controllers, light standards, and other structures, shall be limited to the minimum length, height, and bulk necessary to adequately provide for the safety of the highway user. Earth tone colors of dark shades and flat finish shall be used on all highway fixtures. New and replacement guardrails shall not have a shiny reflective finish. (These features are typically galvanized steel, which weathers naturally to a non-glare finish typically within a year or so.) Retaining walls and other erosion control devices or structures, shall be constructed of natural materials whenever possible and shall, to the maximum extent possible, be designed and sited as to not detract from the scenic quality of the corridor. Such structures shall incorporate heavy texture or articulated plane surfaces that create heavy shadow patterns. Adopted community plans may establish equal or superior standards for highway fixtures.

## **Summary of Effects and Mitigation Measures by Alternative**

Table 5. Summary of Visual Effects and Mitigation Measures by Alternative

	Alternative 2	Alternative 3	Alternative 4	Alternative 5	No Action
Impact 3-1: Temporary Visu	al Impact Cause	d by Constructi	on Activities		
Quantitative Comparison	Minor, short- term construction effects	Minor, short- term construction effects	Minor, short- term construction effects	Minor, short- term construction effects	No construction
Significance before Mitigation	LS	LS	LS	LS	NE
Significance after Mitigation	LS	LS	LS	LS	NE
Mitigation Measures					
None required	X	X	X	X	X
None available					
Effect 3.5-2: Degradation of V	Views to SR 28				
Quantitative Comparison	No degradation of views to SR 28	No change			
Significance before Mitigation	LS	LS	LS	LS	NE
Significance after Mitigation	LS	LS	LS	LS	NE
Mitigation Measures					
None required	X	X	X	X	X
None available					
Effect 3.5-3: Degradation of	Views from SR 2	28			
Quantitative Comparison	No degradation of views from SR 28	No change			
Significance before Mitigation	LS	LS	LS	LS	NE
Significance after Mitigation	LS	LS	LS	LS	NE
Mitigation Measures					
None required	X	X	X	X	
None available					
Effect 3.5-4: Create a New So	ource of Light ar	nd Glare that Af	fects Views		
Quantitative Comparison	No increase in nighttime light and glare as viewed by Kings Beach viewers	No increase in nighttime light and glare as viewed by Kings Beach viewers	No increase in nighttime light and glare as viewed by Kings Beach viewers	No increase in nighttime light and glare as viewed by Kings Beach viewers	No change

	Alternative 2	Alternative 3	Alternative 4	Alternative 5	No Action
Significance before Mitigation	LS	LS	LS	LS	NE
Significance after Mitigation	LS	LS	LS	LS	NE
Mitigation Measures					
Mitigation Measure 3-1: Highway Fixtures with Low-Sheen and Non- Reflective Surface Materials	X	X	X	X	
Mitigation Measure 3-2: Lighting Levels	X	X	X	X	
Mitigation Measure 3-3: Directed Lighting	X	X	X	X	

Effect 3.5-5: Conflict with Policies or Goals Related to Visual Resources

Quantitative Comparison	No conflict	No conflict	No conflict	No conflict	No change
Significance before Mitigation	LS	LS	LS	LS	NE
Significance after Mitigation	LS	LS	LS	LS	NE
Mitigation Measures					
None required	X	X	X	X	X
None available					

Notes:

SU = Significant and unavoidable.

S = Significant.

LS = Less than significant.

NE = No effect.

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# Appendix A Alternatives 2—5:

Plan, Profile & Striping Layout Drawings





















